

BARG Newsletter February 2025



***Ballarat Amateur Radio Group Inc. #6953T
February 2025 Monthly Newsletter***

**Next General Meeting BARG inc
11:00am, Saturday 22nd February 2025
At the Airport - All Welcome**

Contacting us

BARG@BARG.ORG.AU

We're on the web.

www.barg.org.au

https://twitter.com/vk3_barg

<https://www.facebook.com/groups/VK3BML/>



Contents

Contents.....	2
President's Report February 2025.....	3
The Next BARG General Meeting	3
A MAD WEEKEND.....	4
SCENES FROM A HAMVENTION 2025	6
THE ORIGIN OF 73.....	12
RAOTC MARCH 2025 LUNCHEON	14
Yarra Valley Amateur Radio Group Hamfest 2025.....	15
Don't forget the BARG Club Nets	16
Magazine Reviews	17
Amateur Radio Vol 91, Number 1	17
Lo-Key Journal VK QRP Club Review Dec 2024	18
Silicon Chip Review February 2025	19

Front Page Contributor Brad, VK2FQDX

Times and dates of nets as below

Club Nets: VHF NET: Every Tuesday Night at 8 pm on 146.750 MHz - VK3RBA

HF NET: Every Thursday Night at 8 pm on 3.608 MHz - VK3BML

6m NET: Every Tuesday Night at 8:30 pm on 53.650Mhz RX / 52.650Mhz TX - FM with a 91.5 tone - VK3RWU

LINKED REPEATERS: The local VK3RBA-70cm repeater on Mt Buninyong is part of a network of linked repeaters covering North-Western Victoria.

Access details for this repeater have recently changed.

For full details of this linked network and access details see <https://www.qrz.com/lookup/vk3rba>

You can listen to the system live <http://vk3rba.dyndns.org:441/>

This linked system may be accessed via IRLP node 9503



If you have any stories, projects, journeys that we would find interesting.

Anything topical to Amateur Radio, electronics, operating gear, communications, history, photographs.

Just a few lines and if possible some pictures will be a good start to a suitable article

Email to tomvk3dmk@gmail.com



President's Report Febrary 2025



Hamvention has come and gone for this year. Another good attendance, all traders that booked turned up plus one to two extra traders on the day and what looked like around 300 general entries through the gate again.

Feedback is now coming in and some planning has already started for next year.

Figures are still being finalised and there should be a report at the General meeting this Saturday.

Thank you for those who volunteered to help on the Saturday and those that helped on the Sunday during the event and to pack up afterwards.

A special thank you need to go to Nick VK3BA again this year for organising the microwave display, ICOM and a live stream on YouTube for the day.

Nick posted the video of this to the BARG Facebook group this week.

<https://youtu.be/75NEiPunW5c>

<https://youtu.be/daPziC2o0Pw>



That is all for this month. Cheers, 73s Ben VK3NRD

BARG inc. OFFICE BEARERS

President	Ben Daniel VK3NRD	Ordinary Member	Tom George VK3DMK
Vice President	Colin Consiglio VK3NCC	Ordinary Member	Ian Fairweather VK3YFD
Secretary	Peter Westgarth VK3APW	Ordinary Member	Doug Ellery VK3DRE
Treasurer	Chris Huggins VK3QY	Ordinary Member	David Martin VK3KQT
Ordinary Member	Craig Cook VK3KG	Ordinary Member	Mal White VK3OAK
Ordinary Member	Paul Black VK3TXR		

The Next BARG General Meeting
Saturday 22nd of Febrary 2025
11:00am

A MAD WEEKEND

Contributor Nik VK3BA

Thanks to those that came up on air today, Sunday 16th February 2025, either from home or portable, for the Feb MAD session this arvo. While there wasn't a huge amount of active stations, those that were operational had a good time.

Firstly, a big welcome to a new microwave operator in the field – Brad VK3BKQ at Portarlinton on the Bellarine Peninsula. Welcome, Brad – we hope to hear more of you during future outings.



A quick summary from my end. I was set up at QF21CU in the Barrabool Hills, about 10km west of Geelong and about 2km east of the usual VK3UHF FD location, on the side of the laneway with a good LOS path from Northwest to East. I had all bands from 1296 to 10Gigs with 70cmFM liaison. As a result of the borderline cyclonic weather conditions, I decided to remove the 2.4 & 3.4 antennas to reduce the wind load and prevent a repeat of another event due to the tripod lacking some pegs into the ground.

The weather wasn't really kind to a couple of us today – but you won't know unless you have a go. I've done this location and Mt Buninyong quite a few times now and I'm looking for a new location to explore for future MAD's. Attached are a couple of pics from my location today.

My best contacts were Mick VK3CH at Kinglake QF22PL on 10GHz SSB and a partial picture on ATV. On 23cm ATV the video quality was perfect. The path here was 118km.

Stations that I worked this arvo:

Brad VK3BKQ QF21IV Portarlinton – new station

Mick VK3CH QF22PL Kinglake

Ray VK3ACR QF22IK Sunbury

Rob VK3IE QF22JG StAlbans

Rob VK3KRD QF22KH Glenroy

Andrew VK3FS QF21MR Mt Martha

Thanks to Rob VK3IE for being the chief station wrangler today to try and keep some order and coordination in check today.



We hope to work a few more during the next MAD on Sunday 16th March.

Cheers, Nik Presser, VK3BA.



SCENES FROM A HAMVENTION 2025

Contributors Brad VK2FQDX. Colin VK3NCC, Criag VK3KG











A Big Thanks, from all BARG Members to
all who attended the Hamvention 2025
Hope to see you all again in 2026.

THE ORIGIN OF 73



Amateurs have used the term "73" to express — Best Wishes' — since as far back as can be remembered. Of more recent times the term "73's" has crept into amateur jargon, both on the air and in amateur literature.

Although to a great extent this has been accepted by common usage, it is in fact quite incorrect.

As recently as a couple of months ago, following a Divisional Broadcast, an amateur was heard to 'call in' and correct the announcer on the use of "73's" instead of "73". The announcer's comment (and also that of a "breaker") left no doubt in the writer's mind that the amateur attempting to correct the situation was considered "old hat" or to be "flogging an unwilling horse" so to speak.

And so for the record, here is some information on the origin of "73".

The origin of "73" as the telegrapher's conventional signal of greeting has been ascribed to a dinner given to Andrew Carnegie on his 73rd birthday by the Order of Military Telegraphers.

The dinner referred to was given on 27th November 1908, and the signal "73" was played upon in connection with his 73rd birthday.

However, investigation indicates that the term "73" was used for many years prior to that time. This information came from the December Bulletin from the Navy Department Office of the Chief of Naval Operations, USA.

The following material, believed to be authentic, is quoted from the "Telegraph and Telephone Age," dated 1st June 1934:

"It appears from a research of telegraph histories that in 1859 the telegraph people held a convention, and one of its features was a discussion as to the saving of 'line time'. A committee was appointed to G Maxwell Hull, VK3ZS Federal Historian devise a code to reduce standard expressions to symbols or figures.

This committee worked out a figure code, from figure 1 to 92.

Most of these figure symbols became obsolescent, but a few remain to this day, (well, in 1935 anyhow!), such as 4, which means 'Where shall I go ahead? Figure 9 means 'wire', the wire chief being on the wire and that everyone should close their keys. Symbol 13 means 'don't understand'; 22 is love and a kiss'; 30 means 'good night' or 'the end.' The symbol most often used now is 73, which means, 'my compliments', and 92 is for the word deliver.' The other figures in between the foregoing have fallen into almost complete disuse." The following were still in effect in 1905 —

- | | |
|-----------------------------------|-------------------------------------|
| 1 Wait a minute | 22 Love and kisses. |
| 4 Where shall I start in message? | 25 Busy on another circuit. |
| 5 Have you anything for me? | 30 Finished, the end (VAJ) |
| 9 Attention or clear the wire. | 73 My compliments, or Best regards. |
| 13 I do not understand. | 92 Deliver. |

So, there you are! This bit of history leaves no doubt that "73" is quite correct and even that has been changed to mean "Best wishes".

So, does "73's" mean "Best-best wishes" or "Best wisheses" or what?

And then "88" crept in somewhere too! We'll leave the reader to think about it. 'Common Usage' of words and expressions has been the cause of some funny changes.

73. From WIA AR Broadcast.



Advocacy Education
Support

RENEWING? JOINING? Consider these things –

The Wireless Institute of Australia

Congratulations

In becoming a radio amateur, you have joined the ranks of more than 13,000 Australian radio amateurs and a worldwide fellowship of some 3 million, from all walks of life.

Your voice since 1910

The WIA – a united, truly national organisation run by radio amateurs for radio amateurs.

Join, benefit and contribute.
Here's what you get and what you can do.

WIA membership benefits

Amateur Radio magazine

– supporting your interests

6 issues a year – print and online

▶ The trusted source for Australian amateur radio since 1933

▶ Covering **all facets** of amateur radio

▶ Produced **by** Australian amateurs **for** Australian amateurs

▶ Hamads free – For-sale/Wanted – print and online

Discount Card – gets discounts at vendors

WIA Online Bookshop – supporting your self-learning

A curated list of recommended books from trusted sources

▶ WIA books discounted to members, e.g. Foundation Manual

QSL Service – supporting your on-air activities

Send and collect your precious QSL cards. Free to members!

Awards

Go for gold! Well, at least a certificate

Contests

Want to test yourself? And your station?

▶ HF, VHF/UHF, Field days, Local and multi-national contests



The WIA – the one source you can trust

Advancing and protecting our privileges

▶ Every licensee has a stake!

▶ Collective action over decades achieved all we enjoy

▶ Your trusted voice with the authorities – nationally and globally

▶ Effective, regular consultations with the amateur fraternity

▶ Always ensuring our privileges are aligned internationally



Protecting our spectrum

▶ Retained continuing access to the 6m, 70cm, 13cm & 9cm bands

▶ Always acting to have intruders removed from our bands

▶ Opposing interference threats

National news service – VKIWI

▶ Keep up-to-date – local, global and space news

▶ Weekly nationwide broadcasts – 30 minutes of audience-based news

▶ On the bands and online in text, audio and video

▶ Trusted support for amateur radio clubs and societies

Member Engagement

▶ Website – www.wia.org.au

▶ Facebook – www.facebook.com/wiavk

▶ Podcast – www.wia-files.com/podcast/wianews.xml

▶ Twitter – twitter.com/VKIWI

▶ Youtube – tinyurl.com/WIA-News-Videos

▶ Memnet – member-exclusive email bulletins

WIA history

Our origins go back to 1910, when the first Institute was formed to represent wireless experimenters to the government. Major reform of the Radiocommunications Act over the early 2000s, and to amateur radio licensing worldwide, saw a single national organisation formed in 2004 to meet the emerging challenges

WIA around the world

The WIA represents you internationally.

We're a member of the International Amateur Radio Union (IARU), which advocates for amateurs' interests to the International Telecommunications Union, particularly at its World Radio Conferences. These determine global radio regulations and frequency allocations.

The WIA is the only Australian amateur radio body with membership of the International Amateur Radio Union.

WIA national office: Unit 20, 11-13 Havelock Road, Bayswater, Victoria 3153

Hours: 9am-5pm EAST, Mon-Fri. Postal: PO Box 2042, Bayswater, Vic 3153

Join or renew / encourage a friend

Use our Online Membership system, visit:

www.wia.org.au/joinwia/wia/onlinejoin/

Or call (03) 9729 0400.



GOT A NEW LICENCE? 1-Year Additional Membership on us!

If you have received an Amateur Operators Certificate of Proficiency (AOCP) – Foundation, Standard or Advanced – or if you are an Amateur Radio Operator, SWL or other interested party and at any time have not previously been a member of the WIA, you may be eligible for an additional 1-year membership extension to your first years WIA membership subscription*.

If this is you, or someone you know, all that is needed is to complete a WIA membership application form (hard or soft copy) along with a copy of the relevant AOCP qualification (or equivalent if applicable) showing the date of qualification attainment and send them to the WIA head office for processing. Join now and start receiving all the benefits of WIA membership.

(* Subject to WIA Membership being approved and WIA Membership Terms and Conditions being fully met.)

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RAOTC MARCH 2025 LUNCHEON

The Melbourne March 2025 luncheon

will be held at the Caulfield RSL on Thursday 27th March
at 1200 hours for a 1230 start.



The speaker will be Nigel Holmes VK3DZ.

**His presentation is titled
*Radio Australia, CSIR and the ionosphere.***



Synopsis.

The role of the Shepparton International High Frequency Transmitting Station (IHFTS) in carrying Radio Australia for 74 years is known to many. Less well known is its role in research of the ionosphere and reflecting HF transmissions from the Moon's surface. The illustrated talk will outline the research and the mechanisms used to achieve this feat.

**The Caulfield RSL offers a two course meal at a cost of \$36.00 per head.
Soft drink, beer, wine and other drinks can be purchased from the bar.
Tea and coffee can be purchased downstairs.**

RAOTC members are welcome to bring friends, but we must have firm bookings and payment to RAOTC, PO Box 107, Mentone 3194, or payment by EFT with bookings by email with guests names to raotc@raotc.org.au no later than **Wednesday 19th March 2025.**

Despite an increase in costs, we have been able to keep the price at \$36.

Bookings are essential.

Our bank details are: BSB: 633000. Our account number is: 195768379.

Other payment options can be found at: <https://www.raotc.org.au/howtopay.htm>

We will not be able to accept payment on the day.

Note: Tea and coffee will now not be included but can be purchased downstairs.



The March 21,22,23 2025 weekend has been confirmed for Mortlake weekend.
Mortlake Caravan Park, 31 Montgomery Way, Mortlake Vic 2137

<https://www.mortlakecaravanpark.com.au/>

All camping onsite mention you are part of the Portland Radio Group to get discount.
VISITORS WELCOME OVER THE WEEKEND.

Cheers Peter VK3HEW

Hamfest 2025

Saturday 1st March
10am to 2pm at the
Mooroolbark Community
Centre
125 Brice Ave, Mooroolbark
VIC 3138
Entry \$10.00
(cash only event)



Open to traders from 8.00am. Call in on the Yarra Valley Repeater VK3RYV:
146.725Mhz -.6 offset, 123Hz tone or Wires-X: 'Auslink-VIC #07566'
Ample parking available. 4 minutes-walk from the train station.

Table Hire \$20.00. Free tea and coffee provided.
For table bookings and further information contact Steve
VK3NG mob: 0418103487 or email dmo@yvarg.org.au
<https://www.qrz.com/db/VK3YVG>

VK / ZL Events Calendar compiled 16 - 02 – 2025

- WARC FEST – Sun. 23rd Feb. (Encore Events Centre – Hoppers Crossing VK3)
- Yarra Valley ARG HAMFEST Sat. March 1st (Mooroolbark Community Centre VK3)
- Sunshine Coast Car Boot Sale - Sat. March 22nd (Bli Bli VK4)
- EMDRC HAMFEST / CAR BOOT SALE - Sun. March 30th (Burwood VK3)
- REDFEST - Sat. April 12th (Deception Bay VK4)
- BENDIGO AMATEUR RADIO & TECHNOLOGY FEST. 3rd to 5th May (Bendigo VK3)
- Moorabbin & Dist. HAMFEST Sat. 10th May (Kingston City Hall VK3)
- HAMCAMPION 17th to 19th May. (Mayanup Sports Ground VK6)
- ORARC Field Days - Sat. 7th & Sun 8th June (Wauchope Showgrounds VK2)
- AREG Radio & Electronics Sale - Sun 26th Oct. (DogsSA Trning Faciltiy|KILBURN VK5)
- ALARA 50th ANNIVERSARY PROGRAMME - July 25th to 27th (VK3 Various)
- The SPARC Rosebud RadioFest – Sun 16th Nov. (Rosebud VK3)

Find or post event details at Hamfests Australasia Group FB page

<https://www.facebook.com/groups/1675116319317400/>

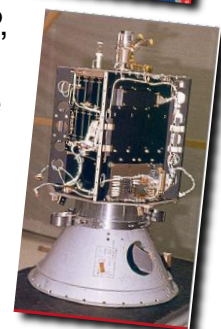
Hit "JOIN" to stay updated



Magazine Reviews

Amateur Radio Vol 91, Number 1

- P4 Editorial. The pros and cons of the Covid pandemic, zoom meetings and club nets. Now its over, return of most activities however some not surviving the transition such as many established field days and Hamventions that were one a yearly pilgrimage.
- P5 Your WIA working for you. Oscar 1, ITU regulations and amateur satellite service frequency allocation. The role of the IARU and WIA in satellite policy.
- P10 Election of directors to WIA Board – nominee information.
- P12 WIA news. Election. US Hams and California blazes. SCAMP, conversational digital mode released. Up and Coming Events.
- P14 AO-7 the oldest man-made space object still working! Part 2. The transponders development and how they worked. History of the previous OSCARs and there command systems and AO-6 and AO-7 along with NOAA-2 satellites the first to use CMOS technology. AO-7 telemetry can still be decoded. Explanation of Baudot.
- P22 Tassie Ham-E-Con 2024. Activities and presenters at the technology conference in VK7, from local and international experts.
- P24 The VK5FIL radio expedition to Flinders Island, South Australia. Grant VK5GR. A well-documented article on planning, setup and operators of this HF and VHF adventure. Using VI60IOTA and a great tally of worked stations at the end a success was declared.
- P31 Parks on the Air activities go from strength to strength. Marty VK4KC. What is POTA, how to get into it and what you can get out of it, the fun and satisfaction of portable operation.
- P36 Far from the urban noise, but with urban comforts. Glenn VK3CAM. Cape Nelson on the International Lighthouse Weekend, 18-19 August 2024. Many world wide contacts in an idyllic “remote” location with amateur radio.
- P39 Go portable, go public and promote amateur radio. Richard VK2SKY. Tips on getting out and working and showing amateur radio to the public.
- P40 Of lobes and dishes from a new angle. George VK3EIP. Looking at the dish antenna, its radiation patterns and advantages and disadvantages of the many configurations of dish and feed point.
- P47 Versatile DIY valve tester vaults un-retired old units. Jim VK5JST. Using modern technology to make a valvetester for all those vales of unknown history that you have in your “spares” box.
- P52 VK3IZ, Peter D Williams SK
- P53 VK3UV, Bruce Bathols SK
- P54 VK4TE, Alex McDonald SK

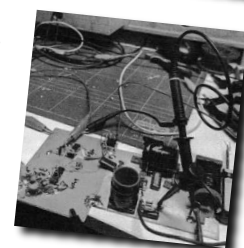
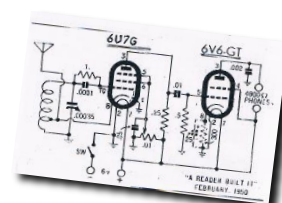
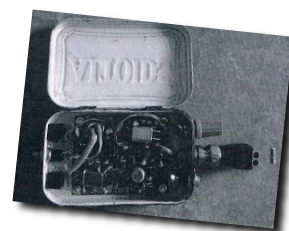
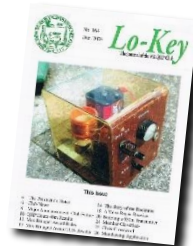


- P55 Spectrum Horizons. Satellites and what is happening on the space scene.
- P56 ALARA. Jenny VK3WQ. Girl Guide challenge and the Tassie Ham-E-Con success.
- P58 Below 25. Alec VK2MV. Reflection on 2024 and the other young amateurs that have joined the team. YOTA information.
- P59 Contesting. Alan VK4SN. Commonwealth Contest March 2025.
- P62 Trade Showcase. Flanged enclosures from Hammond Electronics.
- P63 West News. Will VK6UU. Ham Feast, a 35 to 40 person even, just to get together, eat and enjoy a chat. A story of down sizing your life and shack.



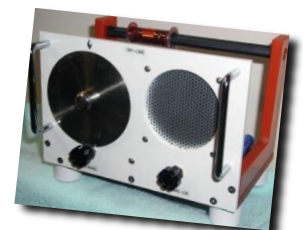
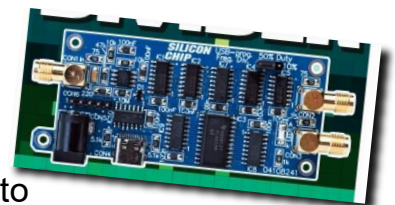
Lo-Key Journal VK QRP Club Review Dec 2024

- P3 Lo-Tone. Terry VK2KTJ. Keep the articles coming in, front and back cover pictures.
- P4 The President's Notes. Trevor VK5ATQ. 40M and 80M news, Morse key construction, WIA reviewing training requirements.
- P6 Club News. Kevin VK5AKZ. 10 year and 20 year members, volunteers to help with journal production, digital copy feedback, past journal issues, members email addresses and contact details.
- P8 Major Announcement: Club Future. Trevor VK5ATQ. Digital Copy of Lo-Key. More helpers to run the club and future activities to encourage QRP and amateur radio in general.
- P10 QRP Hours 40M Results. Garry VK2GAZ. The final scores and feedback from those who entered the event on, Saturday 20th October 2024.
- P12 The Max Brunger Awards for Best Technical Articles Rules 2025. Annual awards focused on Open and Test Equipment areas.
- P13 The Max Brunger Award for Best Technical Articles 2024. Summarises the past year and many articles and the two winners.
- P14 The story of the Rockmite transceiver. Jens VK4PE and Dave K1SWL.
- P18 Reinventing a valve regenerative receiver. Rodney VK4KBI. A bit of valve stuff.
- P20 Adventures building a 630 metre Transmitter. Jordan VK3ACU. Construction and adventures with a homebrew 472 – 479 kHz transmitter
- P24 Member Classifieds.
- P25 Chris-Crossword. Chris VK1CT.



Silicon Chip Review February 2025

- P2 Editorial. Windows 10 and Windows 11, should you upgrade? Should you keep 10 and get another machine for 11?
- P10 Open Source Software. David VK3DSM. What it is, what it can do and how? How its licensed and what you can do to it as well as with it.
- P24 Using Electronic Modules; Mini UPS. Jim Rowe. Looks at the UPS available from AliExpress for about \$2. 5 – 12Vdc input, single Li-po 3.7V battery and selectable 9V or 12V output.
- P32 High-Bandwidth Differential Probe. Andrew Levido. A high voltage device for use with oscilloscopes and makes a handy pair with the current probe published last month. +/- 400V differential and full isolation make it great for power circuits.
- P40 Antenna Analysis and Optimisation. Part 1. Rod VK3YC. Understanding how antennas work and matching them to your project. Smith Charts, terminology, SWR and antenna simulators.
- P48 Mini Projects #021. Wireless Flashing LEDs. Tim Blythman. Looks at how to make LED that operate in a wireless charger loop. Using a Arduino UNO or Nano how to make the RF supply circuit.
- P55 Mini Projects #020. Transistor Tester. Tim Blythman. Using an Arduino Leonardo, a LCD module and some resistors, you can make a device that can detect and analyse diodes, LEDs, PNP and NPN transistors as well as N-CH and P-CH MOSFETS.
- P58 The PicoMite 2. Geoff Graham & Peter Mather. An MMBasic interpreter for the Raspberry Pico 2 and 2W, how it takes advantage of the Raspberry hardware and its other unique features.
- P64 IR Remote Control Keyfob Tim Blythman. An NFC programmable fob, using Jaycar XC3719 IR remote for Arduino. Full instructions with how to change the firmware and can be powered by a coin battery.
- P72 Precision Electronics, Part 4. Andrew Levido. Extending current ranges with extra shunt components. Discusses the importance of Signal Relays.
- P80 Programmable Frequency Divider. Nicholas Vinen. 300Hz to 77MHz, with a programmable divisor from 3 to 21,327,000. An update of a 2024 design, bit this time with USB control to customise your project.
- P88 Serviceman's Log: Another busman's holiday. Dave Thompson. On holiday, but still repairing iPhone and lightning awareness.
- P95 Vintage Radio: TRF-One AM radio. Dr Hugo Holden. Building a modern version of an Australia Electronics project, using a single IC to make an AM receiver.





Ballarat Amateur Radio Group Inc
Registration Number A0006953T
ABN 44 247 200 143
Application for Club Membership

This completed document should be emailed to the Secretary at BARG@BARG.ORG.AU, or brought along to a face to face meeting.

Surname: _____ Given Names: _____

Callsign: _____

Are you a financial member of WIA?: Yes No

Partner's Name: _____

Residential Address: _____

Postcode: _____

PostalAddress: _____
(If different to above) Postcode: _____

Telephone;
(Work) _____ (Home) _____ (Mobile) _____

EmailAddress _____

Unless otherwise requested, Newsletters and Club information will be sent to your email address.
If the Club decides to publish a Club Directory, are you willing to have the above information included? Please indicate: **Yes No**

By applying for membership I indicate my support of the purposes of the Association and agree to comply with the Association rules in effect.

Applicant's Signature: _____ Date: _____

Proposed By: _____ Callsign: _____ Date: _____

Seconded By: _____ Callsign: _____ Date: _____

--ooOOoo--

Presented to Committee: _____ Decision: Accept / Reject

Fee Paid: \$ _____ Date: _____ Receipt No(if applicable:) _____

Entered into Membership Register: _____ Secretary: _____